

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**Page 1 of 1

PATENT NO. : 7,247,185

APPLICATION NO.: 10/710,969

ISSUE DATE : July 24, 2007

INVENTOR(S) : Edward Jobson; Anna Holmgren Hagg

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

(30) Foreign Application Priority Data

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(71) Sökande Volvo Technology Corp, Göteborg SE  
Applicant (s) Ford Global Technologies Inc, Dearborn MI US

(21) Patentansökningsnummer 0200453-9  
Patent application number

(86) Ingivningsdatum 2002-02-15  
Date of filing

Stockholm, 2006-11-22

För Patent- och registreringsverket  
For the Patent- and Registration Office

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/710,969
	Filing Date	08-15-2004
	First Named Inventor	JOBSON et al.
	Art Unit	1724
	Examiner Name	GREENE, JASON M.
Total Number of Pages in This Submission	Attorney Docket Number	6730.058.PCUS00

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(71) Sökande                      Volvo Technology Corp, Göteborg SE  
Applicant (s)      Ford Global Technologies Inc, Dearborn MI US

(21) Patentansökningsnummer      0200452-1  
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För Patent- och registreringsverket  
For the Patent- and Registration Office

  
Hjordis Segerlund

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(12) **United States Patent**  
**Jobson et al.**

(10) **Patent No.:** **US 7,247,185 B2**  
 (45) **Date of Patent:** **Jul. 24, 2007**

(54) **DEVICE FOR TREATMENT OF A GAS FLOW**

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(\*) Notice: Subject to any disclaimer, the term of this  
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 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/710,969**

(22) Filed: **Aug. 15, 2004**

(65) **Prior Publication Data**

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**Related U.S. Application Data**

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**B01D 46/00** (2006.01)  
**F01N 3/022** (2006.01)  
**F01N 3/10** (2006.01)

(52) **U.S. Cl.** ..... **55/523**; 55/282.3; 55/385.3;  
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 96/384; 96/386; 423/212; 423/213.2; 422/170;  
 422/180; 422/182

(58) **Field of Classification Search** ..... 55/282.2,  
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 428/116, 117, 118; 502/439; 422/169, 170,  
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See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,785,781 A \* 1/1974 Hervert et al. .... 422/171  
 3,885,977 A 5/1975 Lachman et al.  
 4,659,348 A \* 4/1987 Mayer ..... 55/DIG. 30

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 19858974 A1 6/2000

(Continued)

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(57) **ABSTRACT**

Device for treatment of a gas flow having at least one body  
 (3) that is adapted to cause a conversion in the composition  
 of the gas. The device is characterized in that the body (3)  
 has a modular construction comprising a plurality of sections  
 (26, 26', 27, 27', 36) with different internal structures  
 that allow gas to flow through the section, and that the  
 sections (26, 26', 27, 27', 36) are arranged so that at least a  
 portion of the gas flows through at least two sections with  
 different internal structures during operation of the device.

**33 Claims, 7 Drawing Sheets**

